

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 12

IMPORTANT: Mark all packages and papers with contract

or order numbers.

1. DATE OF ORDER 12/29/2014		2. CONTRACT NO. (If any) EP-W-11-053		B. SHIP TO				
3. ORDER NO. 0019		4. REQUISITION/REFERENCE NO. PR-OAR-14-01833		a. NAME OF CONSIGNEE OAR/OAP/CCD				
5. ISSUING OFFICE (Address correspondence to) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460				b. STREET ADDRESS US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD				
				c. CITY Washington		d. STATE DC	e. ZIP CODE 20460	
7. TO:				f. SHIP VIA				
a. NAME OF CONTRACTOR EASTERN RESEARCH GROUP, INC.				B. TYPE OF ORDER				
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE		<input checked="" type="checkbox"/> b. DELIVERY		
c. STREET ADDRESS 110 HARTWELL AVENUE				REFERENCE YOUR:		Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.		
d. CITY LEXINGTON				e. STATE MA				f. ZIP CODE 024213136
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OAR/OAP/CCD				
11. BUSINESS CLASSIFICATION (Check appropriate box(es))							12. F.O.B. POINT Destination	
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB								
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS		
a. INSPECTION Destination	b. ACCEPTANCE Destination							
17. SCHEDULE (See reverse for Rejections)								
ITEM NO. (a)	SUPPLIES OR SERVICES (b)			QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) The total estimated cost of the task order entitled, "Support for Regulatory Development, Information Collection Request Update, Program Planning and Electronics Manufacturing Sector" is \$473,209.00 with a Continued ...							
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.				17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:								
a. NAME RTP Finance Center								\$80,000.00
b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive								\$473,209.00
c. CITY Durham								
d. STATE NC								
e. ZIP CODE 27711								
22. UNITED STATES OF AMERICA BY (Signature)				12/29/2014		23. NAME (Typed) Faye Sas TITLE: CONTRACTING/ORDERING OFFICER		17(i) GRAND TOTAL

ELECTRONIC SIGNATURE

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (Rev. 2/25/12)
Prescribed by GSA/FAR 48 CFR 53.213(f)

SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract & order numbers.

DATE OF ORDER
12/29/2014

CONTRACT NO.
EP-W-11-053

ORDER NO.
0019

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>level of effort of 4,095 direct labor hours for the award of the following tasks: Task 1: Project Management (70 hours). Task 2: Rulemaking and Rule Implementation Support (3,200 hours). Task 3: Technical Support for Electronics Manufacturing Sector (575 hours). Task 5: 5 Year Outlook (160 hours). Task 6: Quick Turn Around Support (90 hours). Incremental funding in the amount of \$80,000.00 is obligated to this task order, with \$393,209.00 required for obligation in order to fully fund this task order at a total dollar threshold of \$473,209.00. Contractor incurred expenses shall not exceed the total obligated amount of \$80,000.00. COR: Lisa Grogan-McCulloch Alt COR: Alexis McKittrick TOPO: Lisa Grogan-McCulloch Admin Office: HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460 Accounting Info: 14-15-B-58F7-101A46XQ3-2505-1458FC4860-001 BFY: 14 EFY: 15 Fund: B Budget Org: 58F7 Program (PRC): 101A46XQ3 Budget (BOC): 2505 DCN - Line ID: 1458FC4860-001 Period of Performance: 12/29/2014 to 12/29/2015</p> <p>Task Order award to ERG for \$473,209.00/4,095 hours to provide support for regulatory development, information collection request update, program planning, and electronics manufacturing sector</p> <p>The obligated amount of award: \$80,000.00. The total for this award is shown in box Continued ...</p>				80,000.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$80,000.00

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2006)

Prescribed by GSA FPMR (41 CFR) 101-11.6

Statement of Work

Title: Support for Regulatory Development, Information Collection Request Update, Program Planning, and Electronics Manufacturing Sector

Contract Number: EP-W-11-052/053/054/055

Estimated Period of Performance: 12 month period of performance

Estimated Level of Effort: 5,105 direct labor hours

Task Order Project Officer (TOPO): Lisa Grogan-McCulloch
U.S. Environmental Protection Agency
5 Post Office Square – Suite 100
Mail Code: OEP05-2
Boston, MA 02109-3912
Phone: (617) 918-1481
Fax: (617) 918-0813
Email: grogan-mcculloch.lisa@epa.gov

Alternate TOPO: Alexis McKittrick
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460
Phone: (202) 343-9153
Fax: (202) 343-2202
Email: mckittrick.alexis@epa.gov

Contracting Officer (CO): Faye Sas
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (3803R)
Washington, DC 20460
Phone: (202) 564-2669
Fax: (202) 565-2554
Email: sas.faye@epa.gov

I. INTRODUCTION

The Greenhouse Gas Reporting Branch (GGRB) of the Climate Change Division (CCD) of the Office of Atmospheric Programs (OAP) is responsible for implementation of the Greenhouse Gas Reporting Program (GHGRP), which is codified at 40 CFR Part 98 (Part 98).

This Statement of Work (SOW) is intended to support EPA with development of GHGRP regulatory actions, update the GHGRP Information Collection Request, program

planning, and to provide technical support for GHGRP's coverage of Electronics Manufacturing in Part 98, Subpart I. In support of this work, EPA requires the Contractor to use Confidential Business Information (CBI). Contractor handling of CBI must be performed in accordance with the requirements set forth in the GHGRP CBI policy.

II. BACKGROUND

In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), EPA promulgated Part 98, which requires reporting of GHG information from sources and suppliers in the United States. The purpose of the rule is to collect accurate and timely GHG information to inform future policy decisions.

The proposed rule (74 FR 16448) was published on April 10, 2009. EPA received over 16,000 public comments on the proposed rule. After reviewing all of the comments, EPA split the finalization of the rule into two tracks. Some of the subparts, called the Track 1 subparts, that were included in the proposed rule were finalized and published (74 FR 56260) on October 31, 2009, and the remaining subparts, called the Track 2 subparts, were finalized in 2010 in a series of separate rulemakings (see GHGRP Rulemaking notices here: <http://www.epa.gov/climatechange/emissions/notices.html>).

The 2010 rulemakings also included proposing confidentiality determinations for some reporting elements, proposing the deferral of reporting certain data elements, and two rulemakings amending Part 98 to provide corrections and other technical and clarifying amendments. There were several additional rulemakings in 2011 and 2012 that have included finalizing confidentiality determinations for Track 1 and Track 2 sources, finalizing the deferred reporting of certain data elements, and amending Part 98 to provide corrections and other technical and clarifying amendments. In 2013, there were many additional regulatory actions revising various subparts of the GHGRP, including a rule finalizing substantial edits to Subpart I. EPA estimates approximately 2 additional GHGRP rulemakings that would require support under this SOW during the period of performance.

When EPA revises reporting elements for the GHGRP, EPA typically proposes confidentiality determinations for the revised data reporting elements. EPA anticipates a potential need for this type of action during this period of performance.

Facilities were required to submit annual reports of GHG data and other information to EPA for the 2010 reporting year (RY2010) by September 30, 2011. GHG data reported under the GHGRP are reviewed and verified by EPA. Prior to EPA verification, reporters are required to self-certify that the data they submit to EPA is truthful, accurate and complete. EPA reviews the data submitted by reporters to verify that the GHGRP annual reports are complete, accurate, and meet the Part 98 reporting requirements.

Both Track 1 and Track 2 facilities were required to submit RY2012 reports by March 31, 2013. RY2013 reports will be due by March 31, 2014.

The workload for reviewing and verifying the electronics manufacturing sector reports, covered under Subpart I, will be substantial between April and August 2015 for RY2014 reports. Subpart I verification activities during this time period will include reviewing the submitted reports and electronic verification reports generated by EPA consisting of reports containing data that is outside of expected ranges, etc., as well as contacting facilities to communicate potential reporting errors. (Note that EPA has a separate task order to manage the development of the verification process, and so support of the overall verification process is not within the scope of this SOW. There will be no duplication of effort under this task order.) Development, support, and testing of the electronic reporting tool for RY2014 reporting will be concentrated in the November 2013 to February 2014 timeframe and will consist of suggesting and reviewing changes to the subpart I web-based form and modifying the verification plan, help content and FAQs to align with any changes. Hotline support is continuous throughout this POP, but it will likely be more time-intensive in the February to March 2015 timeframe. This support will consist of drafting responses to hotline inquiries for EPA review and approval. Support of data publication activities for subpart I will likely be focused on the July to September 2015 timeframe. General technical support for subpart I is expected to occur throughout this POP.

The Greenhouse Gas Reporting Program's Information Collect Request (ICR) currently extends until May 31, 2016. The EPA therefore needs to update the ICR prior to this date. The process involves issuing two Federal Register notices as well as reviewing and incorporating comments received from the public as appropriate.

II. STATEMENT OF WORK TASKS

Task 1: Project Management

The Contractor shall provide project management under this task, and shall submit a Monthly Status Report to EPA's TOPO and Contracting Officer (CO) in accordance with the Project Reporting section below. During the Period of Performance, the Contractor shall immediately inform the TOPO and CO by telephone and/or email of any problems that may impede performance along with any corrective action needed by the EPA or the Contractor to solve the problem.

Under this task, the Contractor shall also attend a kick-off meeting, either via conference call or in person, whichever is most cost-effective to the U.S. Government, to discuss the goals and strategy for completing the deliverables. This kick-off meeting will serve as a brainstorming session to clarify the EPA's need for support under the Tasks listed below.

Deliverables and schedule under Task 1

Subtasks	Task 1 Deliverables	Due Date
Task 1.1	Attend kick-off meeting; Prepare revised staffing and budget plan.	Within 1 week of modification of Task Order
Task 1.2	Monthly Status Report	By 10 th business day each month

Task 1.3	Attend End of POP meeting	At least 2 weeks prior to end of POP, per TOPO direction
----------	---------------------------	--

Task 2: Rulemaking and Rule Implementation Support

The Contractor shall provide support for the implementation of the GHGRP rulemaking and Federal Register notice development process, specifically including rulemakings and Federal Register notices related to petitions received from stakeholders, technical revisions, and aggregation of data. The contractor shall provide in-depth support for approximately two regulatory actions, and formatting and editing support for approximately one additional action. Activities may include but are not limited to:

1. Developing briefings, fact sheets, website content, and other communication documents related to GHG Reporting Program regulatory actions.
2. Developing any background support documents necessary for the rulemaking docket or for aggregation of data as identified by the TOPO (e.g., analytical support on regulatory options, rationale for options, methodologies for reporting, etc.). This may include analyzing options for revisions to monitoring requirements, developing technical support documents, and developing engineering cost data.
3. Drafting, reviewing, and providing logistical support for the development of preamble and rule language. Incorporating comments received on preamble from various reviewers.
4. Organizing and categorizing comments and response to comments received on the proposal or rulemaking options.
5. Formatting preamble according to Federal Register guidelines and developing amendatory language from regulatory revisions made using track changes format.
6. Providing assistance adding documents to EPA rule dockets and editing those documents, where necessary.
7. Other tasks related to regulatory development, as directed by the TOPO.

Deliverables and schedule under Task 2:

Subtasks	Task 2 Deliverables	Due Date
Task 2.1	Rule briefings and communications documents support	Within 3 days of TOPO technical direction
Task 2.2	Background support documents	Within 2 weeks of TOPO technical direction
Task 2.3	Preamble/rule support	Per direction of TOPO
Task 2.4	Comment support	Within 3 weeks of TOPO technical direction or per direction of TOPO
Task 2.5	Formatting support	Within 2 days of TOPO technical direction

Task 2.6	Docket support	Within 2 days of TOPO technical direction
Task 2.7	Other regulatory development support	Per direction of TOPO

Task 3: Technical Support for Electronics Manufacturing Sector (Subpart I)

The Contractor shall provide technical support for the implementation and related rulemakings for Subpart I, Electronics Manufacturing. Support activities may include but are not limited to:

- a) Hotline and Question/Answer support - Assist in researching and responding to technical questions from reporters and other stakeholders, such as, but not limited, to questions on the application of monitoring methods and reporting of data in Part 98 associated with Subpart I. This activity may also include developing Frequently Asked Questions (FAQs) to post to the GHGRP website.
- b) Maintenance of Electronic Reporting Help Content - Support maintenance of e-GGRT help content and any supplemental outreach (e.g. subpart-specific webinars) and compliance checklists. Develop revised help content to support the subpart I RY2014 web-form reporting.
- c) Electronic reporting tool development, support and testing – Development, support and testing of a new subpart specific e-GGRT reporting module that covers the revisions to subpart I finalized in September 2013 and ensures accuracy in facility level reporting and consistency with Part 98 reporting requirements. Development of the new form will generally occur in the March to September 2014 timeframe and testing of the existing form will generally occur prior to launch of e-GGRT in November 2014 to February 2015. However, it may be necessary to review or update design requirements, generate e-GGRT change requests to ensure that the reporting web-forms are consistent with any subpart-specific revisions to Part 98. After any redesign, additional testing and review of e-GGRT functionality will be required. (Note that EPA has a separate task order for data system development, so that work is not within the scope of this SOW. EPA will initiate and facilitate coordination as needed. There will be no duplication of effort under this task order.) This also may include developing content for outreach webinars on covering the changes in e-GGRT that stem from the new web-form as well as the changes outlined in the 2013 final rule for Subpart I.
- d) Verification support- Provide support to EPA in conducting subpart-specific verification activities. This support will include the following activities and will occur in a concentrated manner in April through August 2015:
 - i. Reviewing reports generated by EPA and flagging certain GHG reports that have potential data quality issues. Based on the EPA-generated reports citing potential data quality issues, reviewing individual GHG reports and associated information to determine the root cause of potential

data quality issues. In addition to EPA-generated reports citing potential errors, completing an analysis of individual reports to identify errors not captured by the EPA reports (i.e. outlier analysis). This initial review and a summary of issues by subtask should be completed within approximately six weeks of annual submissions. Contractor should draft messages in e-GGRT's correspondence tracker. These messages will be reviewed by the EPA subject matter expert (SME) and sent to notify facility of potential issues including errors in application of monitoring methods, calculation errors and/or data quality issues where appropriate.

- ii. Where appropriate, comparing Part 98 information submitted to EPA with outside data sets, previously reported information (i.e., reporting years) from the facility, and data reported by other facilities in the same industry sector
 - iii. Contacting facility, with approval and participation of EPA SME, if necessary (either by email or by phone) to discuss potential data quality issue, and documenting correspondence.
 - iv. Reviewing re-submitted reports (if applicable) and closing out issue in e-GGRT's correspondence tracker.
 - v. Developing new flags and checks, as applicable, and incorporating those new flags or checks into the verification plan for Subpart I.
- e) **Publication support**- Provide support to EPA in conducting subpart-specific publication activities. This support will be organized by subpart and may include the following activities:
- i. Reviewing data collected by the GHGRP prior to releasing this data to the public to ensure the data is free of any information classified as CBI or otherwise sensitive. This activity will be concentrated in August and September 2015.
 - ii. Determining ways that confidential data collected by the GHGRP can be safely aggregated and presented to the public to support the needs of stakeholders and researching technical justifications for that aggregation.
- f) **Analysis of reported emissions information** – Support analysis and synthesis of subpart-specific reported emissions data and supporting information to assess facility and sector specific trends.
- g) **Technical support related to discussions with and data received from industrial stakeholders** – Support analysis of any data or information received from industrial stakeholders outside of the electronic reporting process and provide technical support as needed for general communications with stakeholders (i.e. verbal, written)

Deliverables and schedule under Task 3:

Subtasks	Task 3 Deliverables	Due Date
3.1	Hotline and Question/Answer support	Within 2 business days of receipt of question
3.2	Maintenance of Electronic Reporting Help Content	Per direction of TOPO (likely updates required 6 weeks in advance (i.e.,

		February 2015) of the reporting deadline
3.3	Electronic Reporting Tool Development, Support and Testing	Per direction of TOPO (likely support and testing required 10-12 weeks in advance (i.e., January 2015) of the reporting deadlines in addition to new web-form development
3.4	Verification support	Per direction of TOPO, but the anticipated dates are within approximately 6 weeks of annual submissions (i.e., May 2015)
3.5	Publication support	Per direction of TOPO
3.6	Analysis of reported emissions information	Per direction of TOPO
3.7	Technical support related to discussions with and data received from industrial stakeholders	Per direction of TOPO

Task 4: Information Collection Request (ICR) Update

Under this task, the Contractor shall perform the analysis necessary to estimate the burden, both in terms of hours and costs, to reporters complying with the mandatory GHG reporting rule (as well as for the Agency) for the purpose of renewing the Information Collection Request for the GHGRP. This will include but is not limited to:

- Updating GHGRP program burden based on the current number of reporters and coverage of sectors, updated regulatory requirements, and updated costs as appropriate.
- Providing support for drafting ICR and Federal Register Notices based on COR technical direction, and revising based on COR technical direction.
- Providing support reviewing public comments and updating ICR as needed based on comments.
- Providing support for drafting final ICR based on COR technical direction.

Deliverables and schedule under Task 4:

Subtasks	Task 4 Deliverables	Due Date
Task 4.1	Updating GHGRP program burden	Per direction of TOPO

Task 4.2	Providing support for drafting ICR & Federal Register Notices	Per direction of TOPO
Task 4.3	Providing support reviewing public comments, updating ICR as needed based on comments, and finalizing ICR.	Per direction of TOPO

Task 5: 5-Year Outlook

Under this Task, the Contractor shall provide support to the EPA for a five year planning effort for the GHGRP. The contractor shall provide support by conducting supporting analyses, developing options in key program areas, facilitating meetings with GHGRP staff, and/or developing planning documents.

Deliverables and schedule under Task 5:

Subtasks	Task 5 Deliverables	Due Date
Task 5.1	Conducting supporting analyses, developing options in key program areas, facilitating meetings with GHGRP staff, and/or developing planning documents.	Per direction of TOPO

Task 6: Quick Turn Around

Under this Task, the Contractor shall provide expert support to the TOPO and respond to requests related to implementation of the Greenhouse Gas Reporting Program and regulatory development, including tasks related to technical briefings, response for comment, outreach materials, and other analyses, often on a quick turn-around basis. This task has been provided in recognition of the significant amount of work associated with implementation in a short time period and that unforeseen issues may arise.

Deliverables under Task 6:

Subtasks	Task 6 Deliverable	Due Date
Task 6.1	No work should be undertaken or travel initiated under this Task until a technical directive (TD) has been issued by the TOPO.	Per direction of TOPO

III. PROJECT REPORTING

Monthly Status Reports NO CHANGE
Distribution of Deliverables NO CHANGE

IV. PERIOD OF PERFORMANCE

The period of performance for this Task Order is one year from the effective date of award.

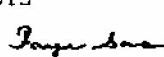
ORDER 2 SUPPLIES OR SERVICES

PAGE OF PAGES

1

9

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 03/25/2015		2. CONTRACT NO. (if any) EP-W-11-053		6. SHIP TO a. NAME OF CONSIGNEE OAR/OAP/CCD				
3. ORDER NO. 0020		4. REQUISITION/REFERENCE NO. PR-OAR-15-00591						
5. ISSUING OFFICE (Address correspondence to) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460				b. STREET ADDRESS US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD				
				c. CITY Washington	d. STATE DC			
				e. ZIP CODE 20460				
7. TO a. NAME OF CONTRACTOR EASTERN RESEARCH GROUP, INC.				f. SHIP VIA				
b. COMPANY NAME				8. TYPE OF ORDER				
c. STREET ADDRESS 110 HARTWELL AVENUE				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated. Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.				
d. CITY LEXINGTON		e. STATE MA		f. ZIP CODE 024213136				
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OAR/OAP/CCD				
11. BUSINESS CLASSIFICATION (Check appropriate box(es))								
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB								
12. F.O.B. POINT Destination								
13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO				
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)				
				16. DISCOUNT TERMS				
17. SCHEDULE (See reverse for Rejections)								
ITEM NO (a)	SUPPLIES OR SERVICES (b)			QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) The total estimated cost of the task order entitled, "Industrial Wastewater Support for the Greenhouse Gas Reporting Program" is \$75,859.00 with a level of effort of 748 direct labor hours. The task order is fully Continued ...							
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO				17(h) TOTAL (Cont pages)
		21. MAIL INVOICE TO						
		a. NAME RTP Finance Center				\$75,859.00		
		b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive						
		c. CITY Durham		d. STATE NC	e. ZIP CODE 27711	\$75,859.00		17(i) GRAND TOTAL
22. UNITED STATES OF AMERICA BY (Signature) 				23. NAME (Typed) Faye Sas TITLE: CONTRACTING/ORDERING OFFICER				

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (Rev. 2/2012)
Prescribed by GSAR 48 CFR 53.213(f)

ORDER FOR SUPPLIES OR SERVICES

PAGE NO

SC SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers

DATE OF ORDER

CONTRACT NO

ORDER NO

03/25/2015

EP-W-11-053

0020

ITEM NO (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>funded thru its completion date of 30 September 2016 at a total dollar threshold of \$75,859.00. Contractor incurred expenses shall not exceed the task order ceiling established at \$75,859.00.</p> <p>The effective date of award of this task order is 01 April 2015, and the period of performance of this task order is from 01 April 2015 to 30 September 2016.</p> <p>COR: Rachel Schmeltz Alt COR: Melissa Weitz TOCOR: RACHEL SCHMELTZ Admin Office: HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460</p> <p>Accounting Info: 15-16-B-58F7-101A46XQ3-2505-1558FC5599-001 BFY: 15 EFY: 16 Fund: B Budget Org: 58F7 Program (PRC): 101A46XQ3 Budget (BOC): 2505 DCN - Line ID: 1558FC5599-001 Period of Performance: 04/01/2015 to 09/30/2016</p>					
0001	<p>Award of New Task Order to Eastern Research Group under Contract #EP-W-11-053 for Industrial Wastewater Support for the Greenhouse Gas Reporting Program</p> <p>Contractor: Eastern Research Group (ERG) Contract #: EP-W-11-053 \$75,859 /748 of hours</p> <p>The obligated amount of award: \$75,859.00. The total for this award is shown in box 17(i).</p>				75,859.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$75,859.00

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2006)
Prescribed by GSA FPMR (48 CFR) 1.53 213(b)

Statement of Work

Title: Industrial Wastewater Support for the Greenhouse Gas Reporting Program

Contract Number: EP-W-11-053

Estimated Period of Performance: 18 month period of performance

Estimated Level of Effort: 748 direct labor hours

Task Order Project Officer (TOPO): Rachel Schmeltz
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW (6207J)
Washington, D.C. 20460
Phone: (202) 343-9124
Fax: (202) 343-2359
Email: schmeltz.rachel@epa.gov

Alternate TOPO: Melissa Weitz
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460
Phone: (202) 343-9798
Fax: (202) 343-2359
Email: weitz.melissa@epa.gov

Contracting Officer (CO): Faye Sas
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (3803R)
Washington, DC 20460
Phone: (202) 564-2669
Fax: (202) 565-2554
Email: sas.faye@epa.gov

I. BACKGROUND

In 2008, EPA was charged with developing and publishing a rule to require mandatory reporting of greenhouse gas emissions in all sectors of the economy. In October of 2009 such a rule was published establishing the Greenhouse Gas Reporting Program (GHGRP) and covering 31 source categories. In June of 2010, an additional rule was signed by the Administrator adding 4 more source categories to the GHGRP, including industrial wastewater treatment, among others. The Greenhouse Gas Reporting Branch (GGRB) of the Climate Change Division (CCD) of the Office of Atmospheric Programs (OAP) is responsible for implementing all rules related to GHG reporting and verifying the data received from covered facilities.

This Task Order is particularly focused on Industrial Wastewater Treatment - Subpart II. Under this Statement of Work, the Contractor will assist in maintaining and further developing the infrastructure of the GHGRP for subpart II, updating the validation and verification plans for this subpart, testing the system to ensure functionality, verifying and analyzing data received under subpart II, providing technical support for any questions submitted to the GHGRP Help Desk, and providing rulemaking support for technical corrections or amendments to subpart II of the Greenhouse Gas Reporting Rule.

II. TASKS AND DELIVERABLES

Task 1: Project Management

The Contractor shall provide project management under this Task, and shall submit a Monthly Status Report to EPA's Contracting Officer's Representative (COR) and Contracting Officer (CO) in accordance with the Project Reporting section below. The Monthly Status Report must break out work performed and funds expended by task.

Under this Task, the Contractor shall also participate in a kick-off call to discuss goals, strategies, and schedule for completing the deliverables. During this kick-off call, the COR and Contractor may agree to initiate weekly or bi-weekly status calls as a means to provide regular updates on work progress.

During the Period of Performance, the Contractor shall immediately inform the COR and CO by telephone and/or email of any problems that may impede performance along with any corrective actions needed by the EPA or the Contractor to solve the problem.

Deliverables and Schedule under Task 1:

Deliverable	Due Date
Participate in Kick-off call	Within two weeks of TO award
Monthly Status Report	By 10th business day each month

Task 2: Rule Support

Under this Task, the Contractor shall provide support to EPA in providing guidance on subpart II of the current rule via the development or revision of Frequently Asked Questions (FAQs) and researching and responding to public questions and requests for clarification on the subpart II rule text. The following activities are anticipated:

- 1) Prepare draft responses to Help Desk questions on subpart II
- 2) As needed, develop new or revise existing FAQs for subpart II

In addition, the Contractor shall prepare background documents to support technical corrections and other amendments to the rule for subpart II based on Help Desk

questions, other feedback from stakeholders, or data gaps identified from parallel work on the GHG Inventory. This may include analyzing options for revisions to requirements, developing technical support documents, developing engineering cost data, drafting language for preamble and regulatory text, and reviewing and drafting responses to public comments in response to draft rulemakings. In the POP of this task order, EPA anticipates beginning work and completing a proposal for one rulemaking, as well as beginning work on a final rulemaking for the same action. This work may also require interaction with stakeholders to gather information to support technical amendments.

Deliverables and Schedule under Task 2:

Deliverables	Due Date
Draft response to subpart II hotline question	Two days after receipt (24 hour turn around within two weeks of a reporting deadline, i.e. March 31, 2016)
Draft subpart II FAQs	Two weeks after technical direction
Final subpart II FAQs	One week after receipt of EPA comments
Rulemaking support including preamble, regulatory language, responses to comments, and other supporting materials	Two weeks after technical direction

Task 3: e-GGRT Development

Under this Task, the Contractor shall provide support to EPA in revising and otherwise maintaining the infrastructure of the GHGRP e-GGRT module for subpart II including providing additional outreach and training materials as needed. The following activities are anticipated:

- 1) Maintenance of electronic reporting help context – Support maintenance of the electronics Greenhouse Gas Reporting Tool (e-GGRT) help content, reporting instructions, any supplemental rule guidance, and compliance checklists.
- 2) e-GGRT support and testing – Support and testing of updated subpart II e-GGRT reporting module to ensure consistency with reporting requirements. The testing will generally occur several weeks prior to launch of e-GGRT in any given reporting year. However, it may be necessary throughout the POP to review and update design requirements, generate e-GGRT change requests to ensure that the reporting forms are consistent with any revisions to Part 98. After any redesign, additional testing and review of e-GGRT functionality will be required.
- 3) Outreach support – Preparing and reviewing/revising subpart II-specific information sheets, presentations, and other outreach documents where specific technical expertise is needed. Support may also be needed in preparing and conducting subpart-specific training in the form of webinars.

Deliverables and Schedule under Task 3:

Information sheets and other outreach materials	One week after technical direction
Help content revisions	One week after technical direction, expected in December 2015/January 2016 timeframe prior to e-GGRT launch.
e-GGRT testing results	Two weeks after technical direction, expected in December 2015/January 2016 timeframe prior to e-GGRT launch

Task 4: Data Verification, Analysis, and Publication

Under this Task, the Contractor shall provide support for verifying and analyzing the subpart II data received from facilities with industrial wastewater treatment under the GHGRP. The contractor shall also provide support in preparing the data for publication on the FLIGHT and EnviroFacts sites. The following activities are anticipated:

- 1) Verification support – Provide support to the EPA COR in conducting subpart II-specific verification activities including the following:
 - a. Review all reports received that contain subpart II data to verify the accuracy and completeness of that data to the extent possible.
 - b. Review messages generated by the verification software and post them in e-GGRT's Correspondence Tracker, as appropriate.
 - c. As needed, compare Part 98 information submitted with outside data sets, previously reported information from that facility, and data reported by other facilities for subpart II.
 - d. Contact facilities, with approval and participation of EPA COR, if necessary, (by email or phone) to discuss potential data quality issues and document all correspondence.
 - e. Review resubmitted reports and close out issues in e-GGRT's Correspondence Tracker.
 - f. Recommend to EPA COR any reports or facilities for further compliance follow up including issues that should be marked as "unresolved" in the e-GGRT Correspondence Tracker.
 - g. Review and revise validation and verification plans including flags and messaging based on lessons learned from previous reporting years' data. Assist in user acceptance testing of validation and verification functions in the e-GGRT subpart II reporting module.

- 2) Publication support – Provide support to the EPA COR and other key personnel (publication team) in conducting subpart II publication activities including the following
 - a. Review format and data to be posted to FLIGHT, including checking those facilities that will be tagged as having “unresolved” reports.
 - b. Review format for the EnviroFacts site including table and data element names and relationships.
 - c. Develop or revise the list of caveats and other explanatory text to serve as “help content” for FLIGHT for subpart II.
- 3) Develop plan for and conduct analyses on single and multi-year (trend) subpart II data to establish a knowledge base of facilities with industrial wastewater treatment including facility types, wastewater characteristics, GHG generation and emissions, and other data. Plan shall include questions to be addressed by data analysis and data elements to be examined.

Deliverables and Schedule under Task 4:

Deliverable	Deadline
Revise subpart II validation/verification plan for RY2015	Expected to occur in Oct/Nov/Dec 2015
Conduct user acceptance testing of validation/verification of e-GGRT for RY2015	Expected to occur in Dec 2015 and January 2016
Review and verify subpart II data received via GHGRP for RY2014 and RY2015	Expected to occur one to twelve weeks after reporting deadline of March 31, 2015 for RY 2014 and March 31, 2016 for RY 2015
Review FLIGHT and EnviroFacts format and data and develop and “help content” for publication for RY2014 and RY 2015	Expected to occur in August-September 2015 and 2016
Develop draft plan for analyzing subpart II data received via GHGRP for RY2014 and RY 2015	One week after data verification is complete (approximately August 1, 2015 for RY 2014 and August 1, 2016 for RY 2015)
Final plan for subpart II data analysis for RY2014 and RY 2015	One week after receipt of EPA comments
Memo on results of subpart II GHGRP data analysis for RY2014 and RY 2015	Four weeks after plan is finalized

Task 5: Quick Turn-Around

The Contractor shall provide expert support responding to 4-6 requests for presentation materials, technical briefings, and specific analyses related to GHG emissions from industrial wastewater treatment as reported under the GHGRP or for possible inclusion in the GHGRP, often needed on a quick turn-around basis. This task has been provided in

recognition of the fact that additional questions and issues may need to be addressed as the rule is implemented and subsequently revised and/or the latest dataset is released to the public.

Deliverables and Schedule under Task 5:

Deliverables	Schedule
Quick Turn Assignment	Due dates for any deliverables will be outlined in technical direction.

III. PROJECT REPORTING

Monthly Status Report

The Contractor shall provide monthly status reports that shall include, at a minimum, the following information for each of the above tasks broken out by task and a summary of all tasks:

- Activities of the past month – a summary of the actions taken and progress made on all outstanding tasks for the past month.
- Activities of the next month – a review of the work planned to be done to meet task requirements.
- Problems/Issues – a discussion of problems or difficulties either anticipated or encountered.
- Hours – as applicable, total hours expended during the month, and cumulative total to date. Hours expended must be identified by individual and labor category.
- Funds – as applicable, total funds expended during the month, cumulative total to date, outstanding commitments, and percentage of approved funds spent to date.

Distribution of Deliverables

All deliverables including status reports between the Contractor and the Government shall be delivered as:

- One copy in paper or electronic format to the EPA COR and EPA Contracting Officer.
- The Contractor shall deliver all draft, and final reports, briefing materials and minutes, data sets, etc. in hard copy or electronic format (HTML, Microsoft Word, Acrobat, Excel, etc. as appropriate) via a delivery service or electronic mail.
- The Contractor shall submit a Letter of Transmittal with each deliverable, unless otherwise noted, which includes, at a minimum, the task/deliverable identified, type (draft or final), due date, submission date, deliverable name, and name of EPA COR.

The EPA COR will review deliverables for technical content, completeness, and grammar. Final acceptance of all deliverables will be performed by the EPA COR or

other individual(s) designated as subject matter technical expert(s) by the EPA COR.

IV. PERIOD OF PERFORMANCE

The period of performance shall be through September 30, 2016.

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

IMPORTANT: Mark all packages and papers with contract

or order numbers.

1

19

1. DATE OF ORDER

10/08/2015

2. CONTRACT NO. (If any)

EP-W-11-053

3. ORDER NO.

0021

4. REQUISITION/REFERENCE NO.

PR-OAR-15-01709

6. SHIP TO:

a. NAME OF CONSIGNEE

OAR/OAP/CCD

5. ISSUING OFFICE (Address correspondence to)

HPOD

US Environmental Protection Agency
Headquarters Procurement Operations
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington DC 20460

b. STREET ADDRESS

US Environmental Protection Agency
1200 Pennsylvania Avenue NW
Mail Code: 62107J
OAP/CCD

c. CITY

Washington

d. STATE

DC

e. ZIP CODE

20460

7. TO:

a. NAME OF CONTRACTOR

EASTERN RESEARCH GROUP, INC.

f. SHIP VIA

8. TYPE OF ORDER

☐ a. PURCHASE

REFERENCE YOUR

☒ b. DELIVERY

Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.

d. CITY

LEXINGTON

e. STATE

MA

f. ZIP CODE

024213136

9. ACCOUNTING AND APPROPRIATION DATA

See Schedule

10. REQUISITIONING OFFICE

OAR/OAP/CCD

11. BUSINESS CLASSIFICATION (Check appropriate box(es))

☐ a. SMALL

☒ b. OTHER THAN SMALL

☐ c. DISADVANTAGED

☐ d. WOMEN-OWNED

☐ e. HUBZone

☐ f. SERVICE-DISABLED
VETERAN-OWNED

☐ g. WOMEN-OWNED SMALL BUSINESS (WOSB)
ELIGIBLE UNDER THE WOSB PROGRAM

☐ h. EDWOSB

12. F.O.B. POINT

Destination

13. PLACE OF

14. GOVERNMENT B/L NO.

15. DELIVER TO F.O.B. POINT
ON OR BEFORE (Date)

16. DISCOUNT TERMS

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) Task Order Title: Greenhouse Gas Reporting Program: Technical Support for Oil and Gas Source Categories. This task order hereby incorporates the Continued ...					

18. SHIPPING POINT

19. GROSS SHIPPING WEIGHT

20. INVOICE NO.

21. MAIL INVOICE TO:

a. NAME

RTP Finance Center

\$425,804.00

b. STREET ADDRESS
(or P.O. Box)

US Environmental Protection Agency
RTP-Finance Center
Mail Drop D143-02
109 TW Alexander Drive

\$425,804.00

c. CITY

Durham

d. STATE

NC

e. ZIP CODE

27711

17(h)
TOTAL
(Cont
pages)

17(i)
GRAND
TOTAL

22. UNITED STATES OF

AMERICA BY (Signature)

10/08/2015

Faye Sas

ELECTRONIC
SIGNATURE

23. NAME (Typed)

Faye Sas

TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (Rev. 20012)
Prescribed by GSA FPMR 48 CFR 83.213(f)

SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and order numbers.

DATE OF ORDER
10/08/2015

CONTRACT NO.
EP-W-11-053

ORDER NO.
0021

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>terms and conditions of contract EP-W-11-053 by reference. The task order period of performance is one year from the effective date of award, from 08 October 2015 to 08 Oct 2016 and is subject to the period of performance limitations established under FAR 52.216-22 Indefinite Quantity (OCT 1995).</p> <p>The Contractor shall perform in accordance with the attached Statement of Work, and the accepted project plan and price proposal dated 28 July 2015 for the award of tasks 5 and 8 with associated responsibilities under tasks 1 and 10 as follows:</p> <p>Task 1 - Project Management: (84 direct labor hours/\$20,416.00);</p> <p>Task 5 - Oil and Gas Emission Source Analysis: (600 direct labor hours/\$73,103.00);</p> <p>Task 8 - International Capacity Building Support: (1200 direct labor hours/\$312,140.00);</p> <p>Task 10 - Quick Turnaround Support: (112 direct labor hours/\$20,145.00).</p> <p>The total estimated cost of the task order award is \$425,804.00 with a level of effort of 1,996 direct labor hours. This is a Time-and-Materials (T&M) task order with a pre-priced total ceiling price of \$425,804.00 which the Contractor is not authorized to exceed. The Contractor exceeds at its own risk.</p> <p>The total obligated ceiling amount for this task order award is \$425,804.00, therefore, this task order is fully funded.</p> <p>All travel (domestic and international) shall comply with the Federal Travel Continued ...</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2004)
Prescribed by GSA FPMR (48 CFR) 53.213

SCHEDULE - CONTINUATION

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER
10/08/2015

CONTRACT NO.
EP-W-11-053

ORDER NO.
0021

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>Regulations (FTR).</p> <p>Contracting Officer's Representative (COR): Kong Chiu 202.343.9309 chiu.kong@epa.gov</p> <p>Alternate Contracting Officer's Representative (Alt COR): Alexis McKittrick 202.343.9153 mckittrick.alexis@epa.gov TOCOR: Kong Chiu Admin Office: HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460 Period of Performance: 10/08/2015 to 10/08/2016</p>					
0001	<p>New task order award for Greenhouse Gas Reporting Program: Technical Support for Oil and Gas Source Categories under EPA Contracts EP-W-11-053 (\$425,804.00/1,996 direct labor hours).</p> <p>Accounting Info: 14-15-BR-58F7X03-101A46-2505-1558FC576 9-001 BFY: 14 EFY: 15 Fund: BR Budget Org: 58F7X03 Program (PRC): 101A46 Budget (BOC): 2505 DCN - Line ID: 1558FC5769-001 Funding Flag: Complete Funded: \$333,124.00</p> <p>Accounting Info: 15-16-B-58F7-101A46XQ3-2505-1558FC5769 -002 BFY: 15 EFY: 16 Fund: B Budget Org: 58F7 Program (PRC): 101A46XQ3 Budget (BOC): 2505 DCN - Line ID: 1558FC5769-002 Funding Flag: Complete Funded: \$92,680.00</p>				425,804.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$425,804.00

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4-2008)

Prescribed by GSA FPMR (41 CFR) 101-11.6

Statement of Work

Title: **GHGRP: Technical Support for Oil and Gas Source Categories**

Contract Number: EP-W-11-052/053/054/055

Estimated Period of Performance: 12 month period of performance

Estimated Level of Effort: 12,016 direct labor hours

Contracting Officer's Representative (COR): Alexis McKittrick
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (6204S)
Washington, DC 20460
Phone: (202) 343-9153
Email: mckittrick.alexis@epa.gov

Alternate COR: Mark DeFigueiredo
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (6207S)
Washington, DC 20460
Phone: (202) 343-9928
Email: defigueiredo.mark@epa.gov

Contracting Officer (CO): Faye Sas
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (3803R)
Washington, DC 20460
Phone: (202) 564-2669
Email: sas.faye@epa.gov

I. Introduction

The Climate Change Division (CCD) in the Office of Atmospheric Programs (OAP) of U.S. EPA's Office of Air and Radiation (OAR) works to assess and address global climate change and the associated risks to human health and the environment. CCD plays a key role in United States and international efforts to address climate change by implementing successful voluntary programs to reduce non-carbon dioxide (CO₂) emissions; rigorously analyzing CO₂ and non-CO₂ greenhouse gas (GHG) emissions and economically efficient reduction, sequestration, and adaptation options; communicating climate analyses and strategies to policy-makers, experts and U.S. climate negotiators; building effective international capacity to analyze and reduce GHG emissions and associated air pollution; and educating the public on climate change. The Greenhouse Gas Reporting Branch (GGRB) of CCD is responsible for a variety of analytical activities relevant to GHGs. One of the primary branch activities includes

implementation of the Greenhouse Gas Reporting Program (GHGRP), which is codified at 40 CFR Part 98 (Part 98) and is also supported by other branches in CCD. The GHGRP, which was required by Congress in the FY2008 Consolidated Appropriations Act, requires facilities to report data from large emission sources across a range of industry sectors, as well as suppliers of certain greenhouse gases and products that would emit GHGs if released or combusted.

In addition to managing the GHGRP, the GGRB is the U.S. lead on an international capacity building engagement with China focused on GHG data and GHG reporting. This work falls under the U.S.-China Climate Change Working Group (CCWG) led by the U.S. Department of State to further U.S. interests with respect to climate change negotiations and engagement with China. It is in the interest of the EPA to help China improve their GHG emissions measurement, reporting and verification capabilities. Improvements in these areas will result in better accountability for evaluating and considering Chinese GHG emissions reductions, especially in the context of international climate change negotiations that the US participates in. This work also supports the April 13th, 2013 Joint US-China Statement on Climate Change that commits the United States to work directly with China through “intensified action and cooperation on climate change” as well as recent U.S. and China Strategic and Economic Dialogues which specifically included GHG emissions reporting. Finally, this work helps fulfill EPA obligations under an Interagency Agreement with the U.S. Department of State. The Petroleum and Natural Gas Systems source category (Subpart W) of the GHGRP includes most of the largest emission sources from petroleum and natural gas systems. The following eight segments currently comprise the Petroleum and Natural Gas Systems source category.

- Onshore Production: Emissions from onshore production of petroleum and natural gas associated with production wells and related equipment.
- Offshore Production: Production of petroleum and natural gas from offshore production platforms.
- Natural Gas Processing: Processing of field quality gas to produce pipeline quality natural gas.
- Natural Gas Transmission: Compressor stations used to transfer natural gas through transmission pipelines.
- Underground Natural Gas Storage: Facilities that store natural gas in underground formations.
- Natural Gas Distribution: Distribution systems that deliver natural gas to customers.
- Liquefied Natural Gas (LNG) Import/Export: Liquefied Natural Gas import and export terminals.
- LNG Storage: Liquefied Natural Gas storage equipment.

For more information on the GHG Reporting Program, see:
<http://www.epa.gov/ghgreporting>.

II. PURPOSE AND SCOPE OF WORK

This Statement of Work (SOW) is intended to provide technical support for certain oil and gas related source categories in the GHGRP. In support of this work, EPA requires the Contractor to use Confidential Business Information (CBI). Contractor handling of CBI must be performed in accordance with the requirements set forth in the attached GHGRP CBI policy.

III. TASKS

Task 1. Project Management

The Contractor shall submit a Monthly Progress Report to EPA's COR and Contracting Officer (CO) in accordance with the schedule below in a format agreed to by the Contractor and the COR. The Monthly Progress Report shall include, at a minimum, the following information by task, in addition to an overall summary across all tasks:

- Activities performed during the past month – a summary of the actions taken and progress made on all outstanding tasks for the past month.
- Activities planned for the next month – a review of the work planned to be done to meet task requirements for the following month.
- Problems/Issues – a discussion of problems or difficulties either anticipated or encountered along with any corrective actions needed by the EPA or the Contractor to address the issue(s).
- Hours – as applicable, total hours expended during the past month, cumulative total to date, and projected hours for the next month. Hours expended must be identified by individual and labor category, but also task.
- Funds – as applicable, total funds expended during the month, cumulative total to date, outstanding commitments, and percentage of approved funds spent to date by task.

The Contractor shall also attend a kick-off meeting, either via conference call or in-person, whichever is most cost effective to the Government, to discuss the goals, strategy, and schedule for completing the deliverables. The Contractor shall participate in a weekly call with the COR to discuss task order planning, and shall submit a weekly task order planning report prior to each call in a format agreed to by the Contractor and the COR. The contractor shall also attend a wrap-up meeting at the end of the Period of Performance.

All deliverables provided by the Contractor shall be delivered in an electronic format (unless directed otherwise by the COR). The COR will review deliverables for technical accuracy, completeness, and grammar. Final inspection, testing and acceptance of all reports and other deliverables will be performed by the COR or other individual(s) designated as subject matter experts by the COR.

Deliverables:	Schedule:
Attend kick-off meeting	Within two weeks of award
Monthly Progress Report	Due by 10th business day each month
Weekly Task Order Planning Call	Weekly
Weekly Task Order Planning Report	Due prior to Weekly Task Order Planning

	Call
Attend wrap-up meeting	No later than one week prior to end of the period of performance, per COR direction

Task 2. Annual Report Verification Support for Petroleum and Natural Gas Systems (Subpart W)

The contractor shall support EPA's efforts to verify annual emissions reports submitted for subpart W. This task is divided into several components:

- Verification of the 2011-14 reporting year subpart W submissions
- Update verification plan for the 2015 reporting year
- Testing of revisions to the subpart W verification plan
- Verification of the 2015 reporting year subpart W submissions
- Technical analyses related to verification
- Communications support

EPA will have a kick-off call with the contractor prior to commencement of verification work.

Subtask 2A. RY 2011-14 Verification. Annual reports are due to EPA by March 31 of each calendar year for GHG emissions in the previous calendar year. For the 2014 reporting year (RY 2014), EPA has already begun verifying reports and anticipates that this task order will be awarded prior to the completion of the RY 2014 verification cycle. Therefore the contractor shall support EPA in continuing RY 2014 (and previous reporting years) verification that has not been completed. Generally, the steps involved in verification include review of verification flags for new submissions and resubmissions, including reviewing deferred data submissions, and communication to facilities concerning the verification flags. The contractor shall use industry expertise for each of the industry segments in subpart W to identify potential substantive errors, draft communication, and review if facilities have resolved the substantive errors. Verification messages that the contractor is not able to resolve will be referred to the COR.

Beginning one week after the verification kick-off call, the contractor shall document the progress of verification through weekly tracking reports. The reports will identify which facilities have been contacted for verification messages, which facilities have responded to verification messages, which facilities have resubmitted, any subsequent actions taken by the contractor, and which facilities need to be referred to the COR.

Subtask 2B. Update Verification Plan. The contractor shall review the existing subpart W verification plan and propose revisions to the verification plan, including revisions to the verification plan that are related to new data to be reported to the GHGRP.¹ Using industry expertise and statistical analysis of reported data, the contractor shall propose

¹ See "Greenhouse Gas Reporting Rule: 2014 Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems: Final Rule", 79 FR 70352 (November 25, 2014).

new checks or identify changes to existing checks. Proposed checks should include algorithm checks, range checks, and statistical checks. The purpose of the algorithm checks will be to check multiple data points in the submissions, such as emissions data against activity data. The range checks will identify absolute outliers and may be simple comparisons or may be based on multiple data attributes. Both algorithm and range checks should analyze data within a single submission, while the statistical checks should compare multiple submissions and identify outliers across all reporters and different reporting years.

The contractor shall provide an outline to revise the verification plan two weeks after the kick-off call. The COR will provide feedback and then after direction from the COR, the contractor shall have one month to draft a revised verification plan. The COR will review the verification plan and after receiving feedback from the COR, the contractor shall have two weeks to finalize the verification plan.

As part of the process for updating the verification plan, the contractor should identify additional data elements that would be useful in verifying the data, but that are not currently collected by subpart W. The contractor should also identify currently collected data elements that could be eliminated from reporting without affecting data quality. The contractor shall provide a list of these data elements to the COR at the same time that the final verification plan is submitted.

Subtask 2C. Test Revised Verification Checks. After providing a revised verification plan, EPA will add the new and updated checks to either the existing electronic Greenhouse Gas Reporting Tool (e-GGRT) verification system (also known as the “integrated Verification Program” or “iVP”) or to the existing list of checks that are run outside of iVP (also known as “external checks”). After the checks have been programmed into e-GGRT, the contractor shall perform a test of the verification system. Prior to testing, the contractor shall develop a test plan that tests all new and modified validation checks. The test plan should include multiple facilities for each segment.

The exact timing of e-GGRT and iVP development for the 2015 reporting year for this work has not been confirmed, but it will likely occur from mid 2015 through early 2016. The COR will provide additional direction on timing after the task order is underway. The initial deliverable will be a test plan which will be approved by the COR. Following approval of the test plan, and the testing itself, the contractor shall provide test results to the COR.

Subtask 2D. RY 2015 Verification. RY 2015 annual report submissions are due by March 31, 2016. For the RY 2015 submissions, verification will commence in April of 2016. The process for RY 2015 will be similar to the RY 2014 verification subtask except that the RY 2015 verification subtask covers the time period during verification startup. The contractor shall initiate all verification messages on original submissions, as opposed to emphasis on reviewing resubmissions. In addition, the verification will include the use of the updated verification checks, which may alter the protocol for sending verification messages.

As with the RY 2014 verification, the contractor shall provide weekly verification tracking reports to the COR. At the end of the period of performance, the contractor shall provide a final report to EPA indicating the status of RY 2015 verification and generally outlining any outstanding issues that need further review.

Subtask 2E. Technical Analyses Relating to Verification. As part of verification, the contractor may be asked to perform assorted technical analyses relating to the verification process. These analyses will be used to develop a better understanding of the reported data and identify ways in which the verification process or the rule itself can be improved. Analyses include, but are not limited to:

- Comparing the reported data to outside datasets
- Analyzing uncertainty in the reported data
- Identifying rule changes that would improve the verification process
- Developing reporting instructions to reduce reporter confusion
- Analyzing trends in the reported data
- Analyzing reported data that are inputs to emission equations

Under this subtask, the COR will provide direction to the contractor on the exact work and the timing of the deliverables.

Subtask 2F. Inputs Support. Prior to the submission of the first Subpart W reports to the GHGRP, EPA deferred the reporting of inputs to emission equations (inputs), also known as “deferred data”, until 2015. This enabled EPA to further evaluate whether disclosure concerns existed with this data. EPA has since finalized a rule affirming EPA’s intent to require the reporting of inputs for subpart W in 2015 and collected this data for reporting years 2011 to 2014. This work may include technical analysis related to inputs reporting and/or updating any verification plan to include revised checks for inputs based on lessons learned from RY 2014 verification. Also, once RY 2015 data is collected, this work may include trend analysis of inputs data in addition to verification of the RY 2015 inputs data.

Deliverables:	Schedule:
Attend kick-off meeting	Within two weeks of award
RY 2011-14 verification tracking reports	Due weekly, beginning one week after kick-off meeting and continuing through summer
Outline to revise subpart W verification plan	Due two weeks after verification kick-off meeting
Draft verification plan revisions	Due one month after receiving feedback from COR on outline to revise verification plan
Final verification plan revisions	Due two weeks after receiving feedback from COR on draft verification plan
Subpart W verification test plan	Due within 7 days of technical direction

	from COR
Subpart W verification test results	Due within 7 days of technical direction from COR
RY 2015 verification tracking reports	Due weekly, beginning April 2016
RY 2015 verification status report	Due one week prior to end of period of performance
Technical analyses relating to verification	Per direction of COR
Inputs support	Per direction of COR

Task 3: Implementation Support for Petroleum and Natural Gas Systems (Subpart W)

The contractor shall provide technical support for EPA's efforts related to implementation of subpart W. This task is divided into several components:

- Help Desk and Frequently Asked Questions (FAQs) support
- Maintenance of electronic reporting help content
- Reporting form review and testing
- Publication support

Subtask 3A. Help Desk and Frequently Asked Questions (FAQs) support. Per direction of the COR, the contractor will research and provide draft responses to technical questions and scenarios raised by facilities related to subpart W. The support may be in the form of responses to frequently asked questions, or responses to help desk questions. The COR will provide assignments to the contractor and specify a turn-around time for the response. For the proposal, the contractor should assume that it will support EPA on approximately 150 questions from reporters during the period of performance.

Subtask 3B. Maintenance of electronic reporting help content. The EPA's electronic Greenhouse Gas Reporting Tool (e-GGRT) contains help content to assist reporters in accurately completing their subpart W annual reports. Per the direction of the COR, the contractor will support EPA in drafting updated help content to reflect changes in regulatory text or otherwise provide additional clarity to reporters. The COR will provide assignments to the contractor and specify a turn-around time for the response.

Subtask 3C. Reporting form review and testing. Per direction of the COR, the contractor will provide support related to reviewing and testing updated subpart W reporting forms to ensure consistency with Subpart W requirements.² The exact timing of reporting form development for the 2015 reporting year for this work has not been confirmed, but it will likely occur from mid 2015 through early 2016. The COR will provide additional direction on timing after the task order is underway. This work will include review of updated design requirements and suggesting changes to ensure that the reporting forms are consistent with subpart W requirements. After the reporting form

² Note that the EPA has a separate task order for e-GGRT development, and that work is not covered by this task order. There will be no duplication of effort under this task order

updates have been implemented, the contractor shall perform testing of the reporting forms based on a test plan developed by the contractor and approved by the COR.

Subtask 3D. Publication support. Per the direction of the COR, the contractor shall support EPA in analyses and communications materials related to publication of subpart W data. This support includes reviewing data collected by the GHGRP prior to releasing this data to the public to ensure the data is free of any obviously large reporting errors and of information classified as CBI or is otherwise sensitive, and, appropriately presenting aggregated CBI data to the public and other various stakeholders.

Deliverables:	Schedule:
Responses to help desk questions	Due within 2 days of technical direction from COR (and due within 24 hours of technical direction from EPA when technical direction is provided within 1 week of GHGRP reporting deadline, i.e., March 31, 2016)
Responses to frequently asked questions	Due within 7 days of technical direction from COR
Review and update Subpart W electronic reporting help content	Due within 14 days of technical direction from EPA
Review of Subpart W reporting forms	Due within 7 days of technical direction from COR
Reporting form test plan	Due within 7 days of technical direction from COR
Reporting form test results	Due within 7 days of technical direction from COR
Publication support	Due within 14 days of technical direction from COR

Task 4. Best Available Monitoring Methods (BAMM) Support for Petroleum and Natural Gas Systems (Subpart W)

Subpart W allows reporters to request to use "Best Available Monitoring Methods" (BAMM) for parameters used to calculate GHG emissions. BAMM can mean any of the following methods specified in 40 CFR 98.234(f)(1): monitoring methods currently used by the facility that do not meet the specifications of Subpart W, supplier data, engineering calculations, or other company records.

EPA anticipates that most of this work will support EPA in processing requests to use BAMM for RY 2016, if applicable, and this work will take place in late 2015 / early 2016. The requirements and deadline for any allowable BAMM for 2016 would be identified in a Subpart W rulemaking that is anticipated to be finalized by the end of 2015. The contractor shall also support EPA in answering questions related to any prior year BAMM requests that have been previously approved or denied. EPA does not

expect additional processing of prior year BAMB requests to occur under this task. The Contractor shall use a module that has been deployed within e-GGRT for processing any BAMB requests.

The contractor shall leverage technical and industry expertise for reviewing BAMB requests. In coordination with the COR, the contractor shall develop a plan for reviewing BAMB requests. The steps for processing BAMB requests are generally as follows. First, the contractor shall review the BAMB request for completeness and clear mention of the parameters for which BAMB is requested. Second, the contractor shall evaluate the adequacy of the request. Third, the contractor shall recommend to the COR a determination for each emission source requested, i.e. whether the request should be approved, denied, flagged for follow up, or does not require further processing. If the request requires follow up with the reporter, the contractor shall draft a message that could be sent to reporter for follow up.

Beginning one week after the BAMB kick-off call, the contractor shall document the progress of BAMB reviews through weekly tracking reports. The contractor shall also be asked to prepare summary statistics of BAMB decisions.

Per direction of the COR, the contractor shall draft help content to address technical questions and scenarios raised by facilities. The help content may be in the form of technical documents, responses to frequently asked questions, or responses to help desk questions. In addition, the contractor shall support the COR in communications and outreach, such as by drafting fact sheets and updating website materials. The COR will provide assignments to the contractor and specify a turn-around time for the response.

Deliverables:	Schedule:
Attend kick-off meeting	Within two weeks of award
BAMB tracking reports	Due weekly, beginning one week after kick-off meeting
Communications support relating to BAMB	Per direction of COR

Task 5. Oil and Gas Emission Source Analysis

Per direction of the COR, the contractor shall perform expert analyses on specific emission sources covered by subpart W and/or specific emission sources not covered by subpart W but included in the oil and gas sector. Such analyses may include, but are not limited to: data quality review, emission factor development, emission coverage analysis, and proposing modifications to or developing new calculation methods. The analyses may utilize both GHGRP data and data from external sources. Examples of emission sources of interest include, but are not limited to: well completions and workovers, reciprocating and centrifugal compressors, well venting from liquids unloading, emissions from atmospheric tanks, associated gas venting and flaring, equipment leaks, and local distribution company mains and services. The contractor shall be asked to provide up to ten (10) technical memos of approximately 5 pages each (excluding

attachments).

Deliverables:	Schedule:
Develop technical memos	Due within 14 days of technical direction from COR
Revised technical memos	Due within 7 days of COR comments

Task 6. Rulemaking Support for 2015 Revisions Rule

The GHGRP is in the process of developing a technical revisions final rule for the Petroleum and Natural Gas Systems source category (Subpart W). Specifically, this rule would build upon the existing robust data collection in the Petroleum and Natural Gas Systems source category to ensure appropriate coverage of this sector and that data collected is representative of industry. The proposed rule proposes adding reporting from certain emission sources that are not currently covered by the GHGRP (such as gathering and boosting, hydraulically fractured oil wells, transmission line blowdowns between compressor stations).³ The rule is anticipated to be finalized by the end of 2015.

The contractor shall provide support as EPA develops the final rule. Activities may include but are not limited to:

- Drafting, reviewing, and providing logistical support for the development of preamble and rule language. Incorporating comments received on preamble from reviewers.
- Developing any background technical and/or support documents necessary for the rulemaking docket as identified by the COR (e.g., analytical support on regulatory options, rationale for options, methodologies for reporting, etc.). This may include analyzing options for revisions to monitoring requirements, researching equivalent methods, developing technical support documents, developing engineering cost data, and developing information collection request modifications.
- Developing briefings, fact sheets, website content, and other communication documents related to the regulatory action.
- Organizing and categorizing any comments and drafting responses to comments received on the proposal or rulemaking options.
- Formatting the preamble according to Federal Register guidelines and developing amendatory language from regulatory revisions made using track changes format.
- Providing assistance adding documents to EPA rule dockets and editing those documents, where necessary.
- Providing logistical support for EPA workgroup discussions and discussions with stakeholders by working with the COR to prepare draft agendas, track attendance, and take notes as requested.
- Other tasks related to regulatory development, as directed by the COR.

³ 79 FR 73148 - <http://www.gpo.gov/fdsys/pkg/FR-2014-12-09/pdf/2014-28395.pdf>

Deliverables:	Schedule:
Attend kick-off meeting	Within two weeks of award
Rule briefings and communications documents support	Due within 3 days of COR technical direction
Background support documents	Due within 2 weeks of COR technical direction
Preamble/rule support	Per direction of COR
Comment support	Due within 3 weeks of COR technical direction or per direction of COR
Formatting support	Due within 2 days of COR technical direction
Docket support	Due within 2 days of COR technical direction
Logistical support	Per direction of COR
Other regulatory development support	Per direction of COR

Task 7. Other Petroleum and Natural Gas Systems (Subpart W) Rulemaking Support

EPA may opt to propose additional regulatory changes to the Petroleum and Natural Gas Systems source category (Subpart W). If additional proposed rules are directed, they may include (but would not be limited to): revisions to certain calculation methods, revisions to monitoring and data reporting requirements, adding monitoring methods for certain segments, revisions based on stakeholder feedback, and editorial errors that may be identified during the course of implementation and/or reporting. Specifically, the EPA may explore potential regulatory opportunities for applying remote sensing technologies and other innovations in measurement and monitoring technology to further improve the identification and quantification of emissions and improve the overall accuracy and transparency of reported data cost-effectively.

The contractor should assume three separate rulemaking actions. Activities may include but are not limited to:

- Drafting, reviewing, and providing logistical support for the development of preamble and rule language. Incorporating comments received on preamble from reviewers.
- Developing any background technical and/or support documents necessary for the rulemaking docket as identified by the COR (e.g., analytical support on regulatory options, rationale for options, methodologies for reporting, etc.). This may include analyzing options for revisions to monitoring requirements, researching equivalent methods, developing technical support documents, developing engineering cost data, and developing information collection request modifications.
- Developing briefings, fact sheets, website content, and other communication documents related to the regulatory action.

- Organizing and categorizing any comments and drafting responses to comments received on the proposal or rulemaking options.
- Formatting the preamble according to Federal Register guidelines and developing amendatory language from regulatory revisions made using track changes format.
- Providing assistance adding documents to EPA rule dockets and editing those documents, where necessary.
- Providing logistical support for EPA workgroup discussions and discussions with stakeholders by working with the COR to prepare draft agendas, track attendance, and take notes as requested.
- Other tasks related to regulatory development, as directed by the COR.

Deliverables:	Schedule:
Attend kick-off meeting	Within two weeks of award
Rule briefings and communications documents support	Due within 3 days of COR technical direction
Background support documents	Due within 2 weeks of COR technical direction
Preamble/rule support	Per direction of COR
Comment support	Due within 3 weeks of COR technical direction or per direction of COR
Formatting support	Due within 2 days of COR technical direction
Docket support	Due within 2 days of COR technical direction
Logistical support	Per direction of COR
Other regulatory development support	Per direction of COR

Task 8. International Capacity Building Support

In support of a workplan negotiated between EPA and China's National Development and Reform Commission (NDRC) under the CCWG, the contractor shall assist EPA with several key international capacity building subtasks. It is in the interest of EPA to help China improve their GHG emissions measurement, reporting and verification capabilities. Improvements in these areas will result in better accountability for evaluating and considering Chinese GHG emissions reductions, especially in the context of international climate change negotiations that the US participates in.

The contractor shall work with the COR to ensure that no funds are provided directly to Chinese government entities. All travel under this task shall be pre-approved through the COR. In addition, the contractor shall work with the COR to ensure that all deliverables under this task are properly branded to reflect the US-China CCWG. Due to the nature of US-China and EPA-NDRC negotiations impacting this work the range or breadth of the activities may change (e.g. scaled-down). However, information has been provided in this task to facilitate planning and budget estimates for proposals.

Subtask 8A Analysis of Chinese GHG Reporting Guidelines. The contractor shall analyze China's draft greenhouse gas reporting guidelines and develop a summary comparing the Chinese guidelines to the U.S. GHGRP Part 98 counterpart. The analysis

should include key differences between the U.S. and Chinese versions as well as recommendations of how the Chinese guidelines can be improved. Recommendations should be specific and include real-world examples from Part 98 and Part 98 data, where possible. The analysis should reflect an understanding of relevant key differences between the same source categories operating in the U.S. and in China. The final report shall be developed in English as well as Chinese. Translation of the Chinese guidelines may also be required. All translations of materials from English to Chinese should be reviewed for technical accuracy. For planning and budgeting purposes, assume two source categories of moderate to high complexity (for example, 40 CFR Part 98 Subpart W) will be covered under this task. Assume technical translations (Chinese to English and/or English to Chinese) supporting this work, in addition to and not including the bilingual report (analysis) would total 120 pages.

Subtask 8B Pilot Baseline Analysis of Chinese Industrial Reporter. The contractor shall work with the COR to identify a Chinese enterprise, facility, or specific sources within a facility as a pilot site to apply GHG reporting methodologies. The methodologies may include GHGRP Part 98 methods, Chinese guidelines, industry practices, or some combination of or derivation (simplification) thereof. The methods would be used to calculate and/or estimate source, facility or enterprise level emissions and provide data to support China's national level inventory efforts. For planning and budgeting purposes, the contractor should assume the pilot will focus on a Chinese oil and gas facility and that the calculation methods used would draw on either or both 40 CFR Part 98 Subpart W and the draft Chinese Oil and Gas sector GHG reporting guidelines. Activities to support this subtask may include, but are not limited to, the following:

- Coordinating in-country emissions calculation activities. This may include development (with input from partner company representatives) or compilation of relevant data and communication and coordination with partner company representatives and contractor representatives to plan the work.
- Executing the in-country emissions calculation work, including ensuring a capacity building component for partner company representatives such that they can duplicate the activity in the future.
- Developing reports (in English and Chinese) detailing the results of the emissions calculation work and identification of potential opportunities for emissions reductions, including but not limited to recommendations for emission technologies and practices that can reduce emissions from key sources. The reports shall include full details of study results and detailed technical analysis of recommended activities.
- The contractor shall plan for up to two 10-day trips in-country for coordinating and conducting this subtask.

Subtask 8C U.S. Study Visit for Chinese Experts. Under this subtask the Contractor shall assist the COR with arranging a study visit that brings Chinese officials and experts to the U.S. for consultative discussions with U.S. technical experts on MRV. The study visit is expected to be one week in length (for budgeting purposes assume seven days including travel to and from China), and include consultations with USEPA, State, industry and/or World Bank technical experts to discuss national, state and/or regional

GHG-MRV and GHG-MRV-related practices. For example, meetings with U.S. Oil and Gas experts or industry representatives might be of interest. For budget and planning purposes, assume that the study visit would include Washington, DC, and Houston, TX to talk to US EPA and industry experts, respectively. EPA will provide visa invitation letter support.

The purpose of the study visit is to build upon or complement activities identified in Subtasks 8a and 8b above. The study visit will further develop the understanding of monitoring, reporting, and verification (MRV) approaches. Study tour participants are expected to meet with subject matter experts in the US and exchange technical details and gain insights leading to enhanced MRV programs.

The benefits to EPA include support of a 2015 US/China agreement under the CCWG and fulfillment of EPA obligations under an IAA with the U.S. Department of State. Further, the study visit enables EPA to share its expertise with partners that may lead to future harmonization of programs as well as reduce the need for EPA staff to travel. Specifically, the Contractor shall make travel arrangements for up to 15 persons from China to the US and return to China. Arrangements are expected to include US round-trip flight from Beijing or Shanghai, intra-China connection to Beijing or Shanghai, as needed, lodging, local travel including logistical support, and per diem. The Contractor shall make arrangements for on-site sequential English to Chinese and Chinese to English interpretation, as needed to support the study tour at each destination. To facilitate the identification of Chinese experts to participate in the study visit, and to make arrangements the Contractor may have to coordinate directly with an in-China partner, for example China's NDRC or institute identified by NDRC.

There is no conference logistical support included in this subtask.

Deliverables:	Schedule:⁴
Analysis of Chinese GHG Reporting Guidelines	Due within 30 days of technical direction from COR
Summary trip report for in-country travel (two)	Due within 14 days of completion of travel
Draft outline of pilot baseline analysis plan	Due within 7 days of technical direction from COR
Pilot baseline analysis plan	Due within 14 days of technical direction from COR
Draft pilot baseline analysis report(s)	Due within 30 days of technical direction from COR
Final pilot baseline analysis(s)	Due within 14 days of comments from COR
Draft Study Visit itinerary and participant list	Due within 14 days of technical direction from COR
Summary trip report for Study Visit with meeting notes and follow-up items.	Due within 14 days of completion of study visit

Task 9. Enhanced Oil Recovery and CO₂ Utilization Analysis

The Contractor shall prepare up to five (5) memos of approximately three to five pages

⁴ No work should be undertaken or travel initiated until a technical directive has been issued by the COR

(excluding attachments, appendices, and accompanying spreadsheets) that analyze key issues relating to enhanced oil recovery, geologic sequestration, and carbon dioxide utilization. The Contractor shall incorporate comments received on draft memos from reviewers on an iterative basis and EPA anticipates up to two (2) iterations with the contractor to provide comments on revised drafts. Topics to be covered in the memos shall be determined by EPA and may include, but are not limited to:

- Status and availability of CO₂ pipelines
- Analysis of monitoring costs for enhanced oil recovery projects
- Technology assessment and accounting methodologies for CO₂ utilization technologies
- Analysis of state regulations governing enhanced oil recovery

Deliverables:	Schedule:
Draft memos	Due within 21 days of technical direction from EPA
Final memos	Due within 7 days of EPA comments

Task 10. Quick Turnaround Support

The Contractor shall provide expert support and respond to requests related to GHGRP, methane emissions, oil and gas, and industrial processes, often needed on a quick turnaround basis. This task has been provided in recognition of the fact that, being a relatively new program, the GHGRP is likely to generate complex technical questions as the monitoring methods and other regulatory requirements are being implemented. The schedule of deliverables for these quick turn-around requests will be included in the technical direction provided by the COR. The Contractor shall, with technical direction from the COR, perform up to 25 assignments anticipated to take approximately 20 hours each. This support may include assistance with analytical tools, assistance with preparing briefing slides, developing FAQ or comment-response documents, or development of short white papers covering critical issues. Issues may include, but are not limited to:

- White paper on the latest advancements for a particular technology for quantifying methane emissions at oil and gas sites.
- Technical analyses to inform EPA voluntary, regulatory, or inventory programs.
- Update on state, regional and international regulatory developments for GHG reporting from petroleum and natural gas systems.
- PowerPoint slides and graphics with analysis of a novel monitoring technology.
- Coverage of a particular meeting or conference.

Deliverables:	Schedule:
No work should be undertaken or travel initiated until a technical directive has been issued by the COR	Per direction of COR

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 66

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1 DATE OF ORDER 11/06/2015		2 CONTRACT NO. (if any) EP-W-11-053		6 SHIP TO.		
3 ORDER NO 0022		4 REQUISITION/REFERENCE NO PR-OAR-15-01146		a NAME OF CONSIGNEE OAR/OAP/CCD		
5 ISSUING OFFICE (Address correspondence to) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460				b STREET ADDRESS US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD		
7 TO.				c CITY Washington	d STATE DC	
e NAME OF CONTRACTOR EASTERN RESEARCH GROUP, INC.				e ZIP CODE 20460		
b COMPANY NAME				8 TYPE OF ORDER		
c STREET ADDRESS 110 HARTWELL AVENUE				<input type="checkbox"/> a PURCHASE REFERENCE YOUR <input checked="" type="checkbox"/> b DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.		
d CITY LEXINGTON		e STATE MA	f ZIP CODE 024213136	Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		
9 ACCOUNTING AND APPROPRIATION DATA See Schedule				10 REQUISITIONING OFFICE OAR/OAP/CCD		
11 BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a SMALL <input checked="" type="checkbox"/> b OTHER THAN SMALL <input type="checkbox"/> c DISADVANTAGED <input type="checkbox"/> d WOMEN-OWNED <input type="checkbox"/> e HUBZone <input type="checkbox"/> f SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h EDWOSB				12 F.O.B. POINT Destination		
13 PLACE OF		14 GOVERNMENT B/L NO.		15 DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		
a INSPECTION	b ACCEPTANCE			16 DISCOUNT TERMS		
17. SCHEDULE (See reverse for Rejections)						
ITEM NO (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) This task order hereby incorporates the terms and conditions under contract EP-W-11-053 by reference. This is a time-and-materials (T&M) task Continued ...					
18 SHIPPING POINT		19 GROSS SHIPPING WEIGHT		20 INVOICE NO		17(f) TOTAL (Cont. pages)
21 MAIL INVOICE TO						
a NAME RTP Finance Center				87,143.24		17(g) GRAND TOTAL
b STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive				87,143.24		
c CITY Durham		d STATE NC	e ZIP CODE 27711			
22 UNITED STATES OF AMERICA BY (Signature)		11/06/2015		23 NAME (Typed) Faye Sas TITLE: CONTRACTING/ORDERING OFFICER		

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 347 (Rev. 7/2012)
Prescribed by GSA FAR 48 CFR 121.130

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers

DATE OF ORDER 11/06/2015
 CONTRACT NO EP-W-11-053

ORDER NO
 0022

ITEM NO (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>order with a pre-priced total ceiling price of \$87,143.24/770 direct labor hours which the contractor is not authorized to exceed. The contractor exceeds at its own risk. The contractor shall perform in accordance with the attached Statement of Work (SOW) and the accepted technical and price proposal dated 27 April 2015 for the award of task 1 and task 3 as follows:</p> <p>Task (1): Project Management (\$2,583.24/18 direct labor hours) Task (3): National Level GHG Emissions Data Publication (\$84,560.00/752 direct labor hours)</p> <p>The total obligated ceiling amount for this task order is \$87,143.24. This task order is hereby fully funded.</p> <p>Contracting Officer's Representative (COR): Leif Hockstad (202) 343-9432 hockstad.leif@epa.gov</p> <p>Alternate Contracting Officer's Representative (Alt COR): Mausami Desai (202) 343-9381 desai.mausami@epa.gov TOCOR: LEIF HOCKSTAD Admin Office: HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460</p> <p>Period of Performance: 11/06/2015 to 11/06/2016</p> <p>New Task Order award for Enhancements and Revisions to National GHG Data System and Publication Portal</p> <p>Contractor: Eastern Research Group (ERG) Continued ...</p>				87,143.24	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(M))

\$87,143.24

AUTHORIZED FOR LOCAL REPRODUCTION
 PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2008)
 Prescribed by GSA FPMR (48 CFR) 101-11.6

ORDER FORM SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers

DATE OF ORDER

CONTRACT NO

ORDER NO

11/06/2015

EP-W-11-053

0022

ITEM NO (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Contract: # EP-W-11-053 \$87,143.24/770 hours Accounting Info: 15-16-B-58F6-101A46-2505-1558FC5667-00 1 BFY: 15 EFY: 16 Fund: B Budget Org: 58F6 Program (PRC): 101A46 Budget (BOC): 2505 DCN - Line ID: 1558FC5667-001 Funding Flag: Partial Funded: \$87,143.24					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

AUTHORIZED FOR LOCAL REPRODUCTION
 PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2008)
 Prescribed by GSA FPMR (48 CFR) 101-11.6

Attachment 1: Statement of Work

Title: Enhancements and Revisions to National GHG Data System and Publication Portal

Contract Number: EP-W-11-052/053

Estimated Period of Performance: 12 month period of performance

Estimated Level of Effort: 1,600 direct labor hours

Contracting Officer's Representative (COR): Leif Hockstad
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (6204S)
Washington, DC 20460
Phone: (202) 343-9432
Email: hockstad.leif@epa.gov

Alternate COR: Mausami Desai
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (6207S)
Washington, DC 20460
Phone: (202) 343-9381
Email: desai.mausami@epa.gov

Contracting Officer (CO): Faye Sas
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (3803R)
Washington, DC 20460
Phone: (202) 564-2669
Email: sas.faye@epa.gov

I. Introduction

The Climate Change Division (CCD) in the U.S. EPA's Office of Air and Radiation works to assess and address global climate change and the associated risks to human health and the environment. CCD plays a key role in United States and international efforts to address climate change by:

- Developing the official annual greenhouse gas (GHG) inventory for the United States, in accordance with commitments under the United Nations Framework Convention on Climate Change (UNFCCC);
- Implementing successful voluntary programs to reduce non-carbon dioxide (CO₂) emissions;
- Analyzing CO₂ and non-CO₂ greenhouse gas (GHG) emissions and economically efficient reduction, sequestration, and adaptation options;

- Communicating climate analyses and strategies to policy-makers, experts and U.S. climate negotiators;
- Building effective international capacity to analyze and reduce GHG emissions and associated air pollution, and;
- Educating the public on climate change.

This Statement of Work (SOW) supports EPA in implementing a variety of activities that are required to fulfill the mission of the CCD.

II. Background

In accordance with U.S. commitments under the UNFCCC and as part of the global effort to document national emissions of greenhouse gases and other precursor gases, the EPA compiles the U.S. GHG Inventory annually. The U.S. GHG Inventory contains emissions data across the U.S. economy through calculations conducted at the source level. The emissions data is compiled into an annual report that informs the UNFCCC and domestic stakeholders on the trends in U.S. greenhouse emissions. A datamart to store and provision national-level greenhouse gas data as compiled in the U.S. has been created to enhance the data handling procedures for compilation of the U.S. GHG Inventory. Additionally, EPA has developed an interactive tool, the Greenhouse Gas Inventory Data Explorer, on its website that provides access to data from the U.S. GHG Inventory.

Under this task order, the Contractor will assist EPA in enhancing and revising the U.S. GHG Inventory data system to store additional data elements included in the U.S. GHG Inventory report. In addition, the contractor will revise the Greenhouse Gas Inventory Data Explorer through enhanced linkages to the existing datamart which would allow further access to U.S. GHG Inventory data and the ability for external stakeholders to create custom queries on U.S. greenhouse gas emissions.

The proposed technical enhancement solutions should enable EPA to easily analyze and review data that is developed for the U.S. GHG Inventory, as well as compare it with other relevant data sets (i.e. list of applicable facilities) to facilitate data publication. These relevant data sets could include emissions data collected and published by EPA's Greenhouse Gas Reporting Program (GHGRP). In addition, the solution developed under this task order should allow real-time, or near real-time, access to data.

Data from the U.S. GHG Inventory is available via an online interface at:
<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html>.

III. Tasks

Task 1: Project Management

The Contractor shall submit a Monthly Status Report to EPA's Contracting Officer's Representative (COR) and Contracting Officer (CO). The contractor retains primary responsibility for project management and is expected to notify the EPA immediately if

there is any reason the project begins to fall behind schedule.

Project management tasks include:

- 1) Creating and maintaining a project schedule with critical path milestones for each task. Staff selected to complete work under each task will have access to each task's relevant project schedule;
- 2) Coordinating with EPA counterparts at Office of Environmental Information, National Computing Center (NCC) and others to access staging and production server environments and other tasks necessary to meet the project schedule; and
- 3) Maintenance of an EPA accessible project management plan, schedules and other key management documents.

Deliverables and schedule under Task 1:

	Task 1 Deliverable	Due Date
Deliverable 1.1	Draft work plan outlining estimated delivery schedule	Within 2 weeks of Task Order Award
Deliverable 1.2	Final work plan and delivery schedule	Within 2 weeks of TOPO comment.

Task 2: National-level GHG Emissions Data System Enhancements and Revisions

The goal of this task is to produce enhancements to the database design based on existing data services storing US GHG Inventory emissions data. The contractor shall coordinate with EPA to review the existing inventory reference data and emissions schema and prepare documentation for areas of enhancement and necessary revisions identified through this review. The review will take into account both the existing reference data and the data handling procedures to extract, transform, and load emissions data via scripts into EPA's Staging datamart and Staging Envirofacts (EF) database.

Based on the review and feedback from the COR, the contractor will prepare draft requirements and design specifications. The contractor, under this task, shall propose design and architecture that provide enhancements necessary to store disaggregated emissions data and also, as directed by the COR, activity data and emission factors within the reference data. The contractor will coordinate with EPA extensively to ensure the enhancements to the data system meets EPA program needs. Finally, the contractor will develop, build, populate, and deploy the enhanced data system.

EPA anticipates that a mix of strategic thinking, systems architecture, and data analysis will be needed to successfully complete this task. Note that EPA will provide the expertise regarding the details of the US GHG Inventory data and enhancements that may be necessary to store additional data elements. The contractor will provide technical assistance in the design and development of the data system that meets EPA's data elements needs.

Activities under this task will include:

- 1) Developing requirements documents for an enhanced data system to store U.S. GHG Inventory data;
- 2) Developing system design and specification documents that include physical database design, final XML schema, and a logical database model;
- 3) Demonstrating how data structure would accommodate desired analytical functions such as analyzing year to year trends or comparison with other data sets;
- 4) Building the data system that conforms to the requirements and specifications documents approved by EPA;
- 5) Loading existing XML files into the data system;
- 6) Deploying system to a test environment and then the final production environment;
- 7) Maintaining a system for tracking issues, change requests, and their resolution in both the development and production environment;
- 8) Coordinating with NCC, Envirofacts, and other counterparts for system hosting;
- 9) Providing access for two EPA personnel to any source code repositories for any software tools developed or modified under this task;
- 10) Providing on-call support for data system related operations issues; and
- 11) Notifying EPA personnel of unplanned outages or issues.

Deliverables and schedule under Task 2:

	Task 1 Deliverable	Due Date
Deliverable 2.1	Draft technical requirements for additional data elements for inclusion	Within 4 weeks of Task Order Award.
Deliverable 2.2	Draft technical requirements for revisions to reference data	Within 4 weeks of COR comment.
Deliverable 2.3	Revisions to reference data	Within 4 weeks of COR comment.
Deliverable 2.4	Deployment of data system to test environment	As directed by COR
Deliverable 2.5	Deployment of data system to production data environment with US GHG Inventory data	As directed by COR
Deliverable 2.6	Final System Documentation	As directed by COR

Task 3: National-level GHG Emissions Data Publication Enhancements and Revisions

The goal of this task is to produce enhancements to the existing public interface for US GHG Inventory emissions data, the Greenhouse Gas Inventory Data Explorer (<http://www.epa.gov/climatechange/ghgemissions/inventoryexplorer/>). Under this task, the Contractor shall provide support related to designing, developing, and deploying the enhanced tool for the U.S. GHG Inventory's data webpage. The contractor, under this task, will consult with the COR in developing a list of other graphics and query options that EPA might want the tool to support. The Contractor, upon approval from the COR, will then systematically work through the list and build the data calls and graphs for Greenhouse Gas Inventory Data Explorer revisions.

Under this task, the Contractor will, upon COR approval, develop enhancements that will include transitioning the graphs and data tables available via the Greenhouse Gas Data Explorer's existing static emissions data to instead link and work from Web services available from the data system developed under Task 2. Enhancements will include design elements for HighCharts graphs to read and plot data from the XML data service. EPA anticipates that a mix of design, communication, and analytical skills will be required by the Contractor to complete this task as well as familiarity with the existing Greenhouse Gas Inventory Data Explorer.

The design should enable users to easily retrieve and customize data to fit their needs. The tool should allow the user to extract national data or to retrieve detailed information on a particular emissions source as compiled in the U.S. GHG Inventory. The tool should target IE 9.+ and must be 508 compliant. The tool is likely to employ tabular data, interactive graphics, dynamic charting and other presentation features. The tool will be targeted to the general public and therefore use general internet navigation; the general public should not require training in order to use the tool.

Activities under this task will include:

1. Developing a list of searches, queries, questions, and/or facts that are most likely to be useful to users. Sort this list to determine how graphics, information and/or queries should be presented to maximize visual appeal and encourage users to interact with the website's features;
2. Creating graphics, images, and other design elements for use in the tool to provide visual interest and supplement navigation;
3. Developing sample graphs, charts, maps, tables, and other displays that could be used to present information compiled for the U.S. GHG Inventory. Determine which aspects of the U.S. GHG Inventory's data to include in these displays, including the data parameters that would be most useful as search or filter criteria;
4. Coordinating with EPA's enterprise-level Google Analytics manager to create and assign the custom event types that will allow us to track detailed user behavior (e.g., what queries are users running).

5. Preparing comprehensive design document on enhanced navigation tools and graphics; and
6. Developing and deploying the tool to the EPA website.

Deliverables and schedule under Task 3:

	Task 3 Deliverable	Due Date
Deliverable 3.1	Review of data elements published in existing datamart and design principles for linkages	Within 3 weeks of kick off meeting
Deliverable 3.2	List of Anticipated Searches and Queries	Within 5 weeks of kick off meeting
Deliverable 3.3	Draft Requirements and Wireframes	As directed by COR
Deliverable 3.4	Final Design	As directed by COR
Deliverable 3.5	Deployment of Tool to Staging	As directed by COR
Deliverable 3.6	Deployment of Tool to Production	As directed by COR

II. Deliverables

Deliverable due dates are specified by task above. Distribution of Deliverables should be handled by sending one copy to the EPA Contracting Officer's Representative (COR).

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

05

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 11/30/2015		2. CONTRACT NO. (If any) EP-W-11-053		6. SHIP TO: a. NAME OF CONSIGNEE OAR/OAP/CCD	
3. ORDER NO. 0023		4. REQUISITION/REFERENCE NO. See Schedule			
5. ISSUING OFFICE (Address correspondence to) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460				b. STREET ADDRESS US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD	
				c. CITY Washington	d. STATE DC
				e. ZIP CODE 20460	
7. TO: a. NAME OF CONTRACTOR EASTERN RESEARCH GROUP, INC.				f. SHIP VIA	
b. COMPANY NAME				8. TYPE OF ORDER	
c. STREET ADDRESS 110 HARTWELL AVENUE				<input type="checkbox"/> a. PURCHASE REFERENCE YOUR: <input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY LEXINGTON	e. STATE MA	f. ZIP CODE 024213136			
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OAR/OAP/CCD	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
12. F.O.B. POINT Destination					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
a. INSPECTION	b. ACCEPTANCE				

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) Task Order Title: Consolidated Support for the Greenhouse Gas Reporting Program (GHGRP) This task order hereby incorporates the contract no. EP-W-11-053 terms and Continued ...					
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:						
a. NAME RTP Finance Center						
b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive						
c. CITY Durham		d. STATE NC	e. ZIP CODE 27711		\$1,009,210.00	17(i) GRAND TOTAL
22. UNITED STATES OF AMERICA BY (Signature) 11/30/2015 Rayna Brown						

SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER

CONTRACT NO.

ORDER NO.

11/30/2015

EP-W-11-053

0023

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>conditions by reference. The performance period for this task order is established pursuant to the contract's Indefinite Quantity (Oct 1995) clause FAR 52.216-22(d).</p> <p>The Contractor shall perform in accordance with the Attachment A Statement of Work (15 pages) dated October 9, 2015 and the accepted technical project plan and price proposal dated October 21, 2015 in the amount of \$1,009,210.00 and 9,028 direct labor hours (pre-priced based on the award of Tasks 1 and 2, Subtasks 7.1, 7.7, 7.8, 7.32, 7.33, 7.34, and Task 10, Task 11, and Task 13 with the proportional award of task 1 and 13).</p> <p>This is a Time-and-Material (T&M) task order with a pre-priced total ceiling price of \$1,009,210.00, which the contractor is not authorized to exceed. The contractor exceeds at its own risk.</p> <p>The Contractor shall perform the following authorized/awarded tasks and subtasks (task numbering is based on the original SOW):</p> <p>Task 1 Project Management (proportional) Task 2 Rulemaking and Rule Implementation Support Task 7 Data Products and Technical Analysis (solely for Subtasks 7.1, 7.7, 7.8, 7.32, 7.33, and 7.34) Task 10 Compliance Monitoring and Assistance Task 11 Publication and Communication Task 13 Quick Turnaround (proportional)</p> <p>The total obligated ceiling amount for this order is \$1,009,210.00. This order is hereby fully funded in accordance with the FAR 52.232-20 Limitation of Cost (AFR 1984) clause.</p> <p>Administrative Contracting Officer (CO): Faye Sas (202) 564-2669 Continued ...</p>					
TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))						\$0.00

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 11/30/2015	CONTRACT NO. EP-W-11-053	ORDER NO. 0023
-----------------------------	-----------------------------	-------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>sas.faye@epa.gov</p> <p>Contracting Officer's Representative (COR): Brian Cook (202) 343-9135 cook.brianb@epa.gov</p> <p>Alternate COR: Rachel Schmeltz (202) 343-9124 schmeltz.rachel@epa.gov</p> <p>The Technical Advisors stated in the SOW are not appointed CORs and are not authorized to provide technical direction or to perform any of the COR duties. The Contractor shall only accept and act on technical direction provided in accordance with the contract clause EPAAR 1552.237-71 Technical direction and the attached Attachment B Contracting Officer's Representative (COR) Appointment Memo (12 pages).</p> <p>All travel (domestic and international) shall comply with the Federal Travel Regulations (FTR).</p> <p>The Contractor is not authorized to use the following proposed subcontractors in performance of the services under this order until consent is granted by a Contracting Officer in accordance with FAR 52.244-2 Subcontracts (e) (1):</p> <p> ** Sebastien Raoux (Transcarbon International)</p> <p> ** The Cadmus Group</p> <p>This task is for severable services.</p> <p>The Contractor hereby acknowledges and Continued ...</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(f))

\$0.00

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2008)
Prescribed by GSA FAR (48 CFR) 53.213(f)

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO

4

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER

CONTRACT NO.

ORDER NO.

11/30/2015

EP-W-11-053

0023

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>accepts this order by signing and dating below:</p> <p>_____</p> <p>Print Name and Title</p> <p>_____</p> <p>Signature</p> <p>_____</p> <p>Date</p> <p>TOCOR: Brian Cook Max Expire Date:</p> <p>11/29/2016</p> <p>Admin Office:</p> <p>HPOD</p> <p>US Environmental Protection Agency</p> <p>Headquarters Procurement Operations</p> <p>Ariel Rios Building</p> <p>1200 Pennsylvania Avenue, NW</p> <p>Washington DC 20460</p> <p>Period of Performance: 11/30/2015 to 11/29/2016</p>					
0001	<p>Pre-Priced Services (Labor and Materials/Other Direct Costs (ODC))</p> <p>Time-and-Materials (T&M) Line Item</p> <p>Estimated Labor and Materials/ODCs: \$1,009,210.00</p> <p>Labor Hours: 9,028</p> <p>Awarded Tasks/Subtasks: Task 1 (proportional), 2, Subtasks 7.1, 7.7, 7.8, 7.32, 7.33, and 7.34, and Task 10, 11, and 13 (proportional).</p> <p>Requisition No: PR-OAR-15-01842, PR-OAR-16-00092</p> <p>Accounting Info:</p> <p>16-17-B-58F7-101A46XQ3-2505-1658FC6016</p> <p>-001 BFY: 16 EFY: 17 Fund: B Budget</p> <p>Org: 58F7 Program (PRC): 101A46XQ3</p> <p>Budget (BOC): 2505 DCN - Line ID: 1658FC6016-001</p> <p>Funding Flag: Complete</p> <p>Funded: \$213,116.50</p> <p>Accounting Info:</p> <p>Continued ...</p>				1,009,210.00	
TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(f))					\$1,009,210.00	

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2008)
Prescribed by GSA FAR (48 CFR) 53.213(f)

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

5

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 11/30/2015	CONTRACT NO. EP-W-11-053	ORDER NO. 0023
-----------------------------	-----------------------------	-------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	15-16-B-58F7-101A46XQ3-2505-1558FC5791 -001 BFY: 15 EFY: 16 Fund: B Budget Org: 58F7 Program (PRC): 101A46XQ3 Budget (BOC): 2505 DCN - Line ID: 1558FC5791-001 Funding Flag: Complete Funded: \$796,093.50					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(f))

\$0.00

AUTHORIZED FOR LOCAL REPRODUCTION
 PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2006)
 Prescribed by GSA FPMR (41 CFR) 101-11.6